

7/25/2019

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

4140 QT 1.250



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C3-C-8

Job Sheet 198323



Part No: C3-C-8

Job Qty: 15 pcs

Part Name: Lifting Bushing



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/25/19

Job Tracking No:

Due Date: 9/9/19

Created By: Jennifer Renwick

Type: Stock

Description:

Note: DWG C3-C Rev J IPP Rev A 18.03.28 New issue DP Verify DD/IPP Rev. B 19.04.25 drawing revision DP Verify DD/IPP Rev. C 19.05.03 drawing revision DP Verify DD/IPP Rev. D 19.07.23 drawing update DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup	Run		
110	SL-154 - 1	15 pcs	9/9/19	9/9/19	1.00	7.50	SL-154 - 1	19/10/31
120	QC 2	15 pcs	9/9/19	9/9/19	0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	19/10/31
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	
							QC 2 - 66	
							QC 2 - 64	
							QC 2 - 65	
							QC 2 - 5	
							QC 2 - 71	
							QC 2 - 73	
							QC 2 - 69	
130	QC 8	15 pcs	9/9/19	9/9/19	0.00	0.00	QC 8 - 12	19/10/31
							QC 8 - 14	
							QC 8 - 17	
							QC 8 - 20	
							QC 8 - 25	



Container No: S228574



Part: C3 - C - 8

Job No: 198323

Serial No/Batch: S228574

Revision: J

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 10/31/19

Plex 7/25/19 8:36 AM Dart.Renwick.Jennife

7/25/2019

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
190	QC 21 - SA	15 pcs	9/9/19	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 53
Part Op 110 - MORI SL-154 LATHE - 1-Machine as per DWG. FC006 FOLIO REV: <u>AA</u> DWG REV: <u>J</u> 2- Descriptions: Deburr 120 - QC2- Inspect parts off machine FAI/FAIB 130 - QC8- Inspect parts - second check 150 - -Issue P/O; <u>44956</u> -Nickel plate, MIL-C-26074 Class 2 Grade B OR QQ-N-290A, Class 2, Grade E -Material type; 4140 -Certificate of Conformity is required 160 - Receive & Inspect for Damage & Mat'l Certs 170 - QC6- All purchased or subcontracted products 180 - Identify as per dwg & Stock Location: _____ 190 - QC21- Final Inspection - Work Order Release					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
MT-4140QT-R1.250	AISI 4140 Quenched & Tempered Steel Round Bar 1.250" Dia.	1.2450 ft (.083 ea)	110-SL-154 - 1	<u>5017918</u>	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
110-SL-154 - 1	MT-4140QT-R1.250	1	10	0	
Part Specifications					
Specifications could not be found.					

Plex 7/25/19 8:36 AM Dart.Renwick.Jennifer

ART ACE LTD		Work Order:	198323 104245
Description: LIFTING BUSHING		Part Number:	C3-C-8
Issn Dwg:		Rev: 1	Page 1 of 1

INSPECTION SHEET

[illegible]

Measured by: <i>AS</i>	Checked by: <i>mf</i>	QC Inspector:
Date: <i>19/10/31</i>	Date: <i>19/10/31</i>	Date:

Checked by:

QC Inspector:

Date: 19/10/31

Date: 19/10/31Date:

Engineering Approval: (If necessary)		Date:
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Date:

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

Date _____

Change

New Issue

Revised byKJ

Approved



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044956**



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044956

PO Date: 10/31/19

Due Date: 11/11/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
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11/5/2019

PURCHASE ORDER



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044956



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	198323	C3-C-8	C3-C Rev J	Lifting Bushing -Issue P/O -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required	Firmed X15	-	11/11/19	15 pcs	0 pcs	15 pcs	\$6.8142/pcs	\$102.21

NOV 08 2019



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PURCHASE ORDER **POHB044956**



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	R202590	C3-13-4-2	C3-13-4-2 Rev 4	Keeperless Adapter Outside Processing - Nickel Plate - Issue P/O -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required	Firmed	-	11/11/19	10 pcs	0 pcs	10 pcs	\$12.00/pcs	\$120.00

Line Item Note ***PARTS TO BE STRIPPED and then contact Dart before plating.***

11/5/2019

PURCHASE ORDER



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Canada

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PURCHASE ORDER

POHB044956



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	OH201654	C3-OH	C3/O&OPM-C3 Rev L Rev 2/L	C-Series Remote Hook 3,000 lbs Lift Capacity --Issue P/O -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required	Firmed	-	11/11/19	1 pcs	0 pcs	1 pcs	\$304.2852/pcs	\$304.29

Line Item Note: 1 kit = 6 pcs

Grand Total: \$526.50



Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044956



Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A022 Apical Processing

A024 process certifications

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing (Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/5/19 12:50 PM Dart.Guerin.Kimberley



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SUBCONTRACT SHIPPER

SUBCONTRACT SHIP TO

Ship To: Group Altech
2455 Halpern
St Laurent, QC H4S 1N9 Canada
Phone: 514-335-3666 Fax: 514-335-3868

SHIPPER

Shipper No: 1701
Shipper Date: 10/31/19
Carrier: *
Ship Via:
Vehicle Reg:
Note:
Freight Terms:

Part Information

Part No: C3-OH
Cust Part No: C3
Reference No:
Part Information Note: DWG C3/O&OPM-C3 Rev L. Rev. 2/L IPP Rev. A
18.04.24 new issue DP Verify DD
Drawing No:
Program:
Program Customer:
Addl Docs:
Commercial: Product Line: Remote Cargo Hook
Primary OEM Application: Generic
Manufacturer: DART
Business Segment: Mission - Utility & Other
Advertised on web?: No

Name: C-Series Remote Hook 3,000 lbs Lift Capacity
Product Family: External Load
Piece Weight: 0 lbs
Alloy Type:
Alloy - Temper: -
Description:
Quantity:

OPERATION

Operation: **Outsource - 15 - Nickel Plate - 175**
Description: -Issue P/O; _____ -All noncertified parts
specifying a finish of Nickel Plating per QQ-N-290, or
parts with drawings that are missing a specification
Can be Nickel Plated per ASTM B733 Type 4/5,
SC0-SC4 or MIL-C-26074 Class 1/2 -Material type;
4140 -Heat treat must be carried out to specified
hardness if noted on the drawing. -Plating thickness
must be carried out as specified on the drawing. -
Certificate of Conformity is required

Note:

DETAIL

Part	Operation	PO	Job	Container	Heat Code	Net Weight (lbs)	Gross Weight (lbs)	Quantity
C3-OH	Outsource - 15 - Nickel Plate -Issue P/O; _____ -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required	POHB044956	OH201654	S220933		0	0	1
C3-13-4-2	Outsource - 15 - Nickel Plate Outside Processing - Nickel Plate -Issue P/O; _____ -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that	POHB044956	R202590	S228537		0	0	10

	are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 - Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required							
C3-C-8	Outsource - 15 - Nickel Plate -Issue P/O; _____ -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type; 4140 - Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. - Certificate of Conformity is required	POHB044956	198323	S228574		0	0	15
			Total	3	0	0	26	
Driver Signature								
Customer Copy Plex 10/31/19 3:13 PM Dart.Guerin.Kimberley								



Certificat de Conformité / Certificate of Compliance

(023732-2)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupealtech.com

Bon de Livraison / Packing Slip

023732 - 2

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
07-Nov-2019		Jigar Patel				POHB044956			
Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details	Description pièce(s)	CATG. U/M	Comm. /Ordered	Quantités / Quantities			À venir/ Back Order	
	Job # / Ref #				Exp/ Shipped	Qté NC/ NG Qty	Qté Scrap/		
	Rev3	C3-C E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 OR AS PER B733 TYPE - 4 / 5, SC0 - SC4 OR MIL-C-26074 CLASS - 1 / 2 0.0004 " - 0.0006 " BAKE AFTER	E-NICKEL-500 CH	15	15	0	0	0	
3	C3-OH Rev.L, 2/L	C3/O&OPM-C3 STRIP E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 OR ASTM B733 TYPE 4/5, SC0-SC4 OR MIL-C-26074 CLASS 1/2 0.0009 " - 0.0011 " (FOR HOOK ONLY) 0.0004 " - 0.0006 " (FOR REST OF THE SMALL PARTS) BAKE AFTER 1 KIT = 6 PCS	E-NICKEL-500 CH	1	1	0	0	0	
4	STRIPPING CHARGES Rev.	STRIPPING CHARGES 01 -STRIP [STRIP]	STRIP LOT	1	1	0	0	0	
5	BAKING CHARGE Rev.	BAKING CHARGE 01 -BAKING, HYDROGEN EMBRITTLEMENT RELIEF	BAKE MIN-CHG	1	1	0	0	0	

DAS
81
9-89

RECEIVED
NOV 08 2019

DAS
81
9-89

RECEIVED

NOV 08 2019

Notes Additionnelles / Additional Notes

DART AEROSPACE LTD.

Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

Entered: _____ Date: _____

NCR No. _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐



Job: <u>198323</u>		DISPOSITION		DEPARTMENT/PROCESS		Engineering	
Part No. <u>C3-C-8</u>		Rework ☐ Scrap ☐ Use-as-is ☐		Skid-tube Machining ☐ Large Fab ☐		Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Water Jet ☐ Supplier ☒ Quality ☐	
Date: <u>NOV 18 2019</u>	Sequence #: <u>QC-6</u>	QTY Affected: <u>10 of 15 PCS</u>		Disposition		D:\RRB (Q51042)	
Description Work Order Deviation				Completed By <u>191108</u>			
Nickel plated parts arrived with plating chipped/missing in some areas <u>QC</u> <u>Qty 10 pcs will be split on other work order 198323-A</u>				Lead hand / Supervisor		QC / QA Coordinator	
Root Cause		FAULT CATEGORY					
Operator ☐		Pressure/Forced ☐		Contamination ☐		Power Loss/Surge ☐	
Manufacturing Process ☒		Bending ☐		Misaligned/off center ☐		Folio/Program ☐	
Equip/Tooling ☐		Crushing ☐		BOM/Route ☐		Grain Direction ☐	
Handling/Preservation ☐		Cracks ☐		Broken/Damage/Defect ☐		Weld ☐	
Material ☐		Crimp/Kink/Ripple/Wave/Twist ☐		Incomplete/Unclear Instructions ☐		Wrong Stock Pulled ☐	
Product Improvement ☐		Marks/Chatter ☐		Drill Holes ☐		Out of Sequence ☐	
Process Improvement ☐		Mislabeled ☐		Fit/Function ☐		Off-set/Set-up ☐	
Human Factors ☐		Other/Details:				Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☒ Part Lost/Missing ☐ Misread ☐	